

Dividend – The number in division that is being divided.

$35 / 5 = 7$	$40 \div 8 = 5$	$12 \overline{) 36} \begin{matrix} 3 \end{matrix}$
\uparrow	\uparrow	\uparrow
dividend	dividend	dividend

Divisor – The number that divides another number in division.

$35 / 5 = 7$	$40 \div 8 = 5$	$12 \overline{) 36} \begin{matrix} 3 \end{matrix}$
\uparrow	\uparrow	\uparrow
divisor	divisor	divisor

Fact Family – a set of related arithmetic facts linking two inverse operations

Fact Family	
$5 * 7 = 35$	$35 / 7 = 5$
$7 * 5 = 35$	$35 / 5 = 7$

Factor Pair – two factors of a counting number; a given number may have more than one factor pair

Factor Pairs of 18: 1 and 18
3 and 6
2 and 9

Factor — each of the two or more numbers in a product; as a verb, it also means to represent a number as a product of factors

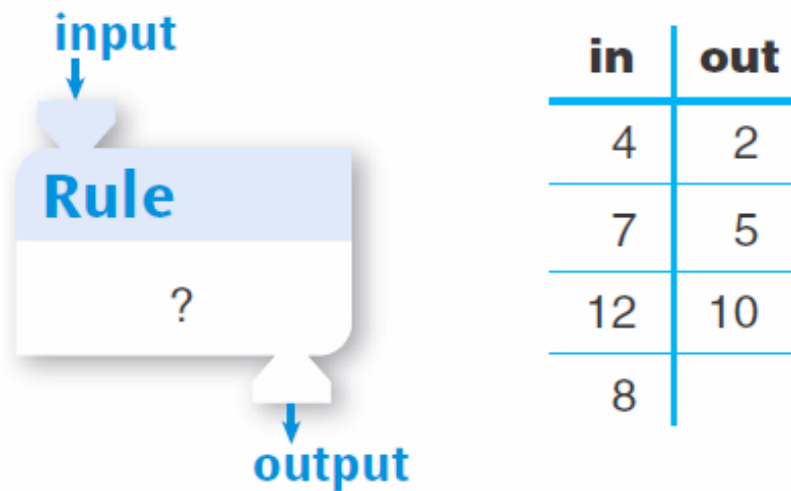
$$\begin{array}{ccc} \text{factors} & & \text{product} \\ \swarrow & \searrow & \downarrow \\ 8 * 6 = 48 \end{array}$$

False number sentence — a number sentence that is not true!

$$5 + 5 = 15 - \text{WRONG!}$$

$$6 * 7 = 52 - \text{NOT!}$$

Function Machine – a problem in which two of the three parts of a function (input, output, and rule) are known, and the third is to be found out



A "What's My Rule?" problem

Multiples – the product of an integer with another integer

Multiples of 7 = -14, -7, 0, 7, 14, 21, etc.

Multiplication Fact – the product of two 1-digit numbers

$$6 * 7 = 42$$

Number Sentence – two expressions with a relation symbol

$$5 + 5 = 10$$

$$2 - ? = 8$$

$$16 \leq a * b$$

$$A^2 + b^2 = c^2$$

Open Number Sentence – a number sentence with one or more variables; open sentences are neither true or false

$$9 + \underline{\hspace{1cm}} = 15$$

$$? - 24 < 10$$

$$7 = x + y$$

Parentheses –

()

Percent – per hundred, for each hundred, or out of a hundred

$$1\% = \frac{1}{100}$$

$$48\% = 48 \text{ out of } 100$$

Product – the result of multiplying two numbers, called factors

$$\begin{array}{ccc} \text{factors} & & \text{product} \\ \swarrow \quad \searrow & & \downarrow \\ 8 * 6 = 48 \end{array}$$

Quotient – the result of dividing one number by another number. The “answer” for division

quotient
↓
 $35 / 5 = 7$

quotient
↓
 $40 \div 8 = 5$

quotient
↓
 $12 \overline{) 36}$
3

Remainder – the amount left over when one number is divided by another number.

remainder
↓
 $35 / 4 = 8 \text{ R}3$

remainder
↓
 $40 \div 9 = 6 \text{ R}4$

remainder
↓
 $10 \overline{) 36}$
3 R6

Solution of an Open Sentence – a value or values for the variable(s) in an open sentence that make the sentence true

$$5 + 7 = n$$

Solution is $n = 12$

$$5 + g > 12$$

Solution is $g = 8, 9, 10, 11 \dots$

Square Number – figurative numbers that are the product of a counting number and itself



$$4 * 4 = 16$$



$$3 * 3 = 9$$



$$2 * 2 = 4$$

True Number Sentence – a number sentence stating a correct fact

$$75 = 25 + 50$$



Turn-around Rule – a rule for solving addition and multiplication problems based on the Commutative Property

If you know $6 * 8 = 48$, then you know $8 * 6 = 48$

If you know $6 + 8 = 14$, then you know $8 + 6 = 14$

Variable – a letter or other symbol that represents a number. It can represent a single number or many different numbers.

variable



$$5 + n = 9$$

n can only be 4

variable



$$x + 2 < 9$$

x can be any number less than 7